

**Remarks**

Applicants respectfully request reconsideration of the present application in view of the foregoing amendments and the following remarks. Claims 1-20 are pending in the application. Claims 1-20 are rejected. No claims have been allowed. Claims 1, 3, 5, 8, 11, 14, 17, and 19 are independent. Claims 1, 3-5, 8-15, and 17-19 have been amended.

***Cited Art***

The Action cites U.S. Patent Application Publication 2002/0156875 by Pabla (hereinafter “Pabla”).

***Rejections under 35 U.S.C. § 101***

The Action rejects claims 8-10 and 17-18 under 35 U.S.C. § 101 as allegedly directed toward non-statutory subject matter. Applicants respectfully traverse this rejection.

Independent claim 8 has been amended to recite “a computer readable storage medium . . .” and independent claim 17 has been amended to recite “a computer readable storage media . . .” Their dependent claims 9-10 and 18, respectively, have been similarly amended. The claims as recited are now statutory and should be in condition for allowance. Moreover, the words “communication media” are removed in the foregoing amendment from the paragraph at page 37, line 17. The rejected claims therefore should pass muster under § 101.

Applicants respectfully request withdrawal of the 35 U.S.C. § 101 rejection and allowance of independent claims 8 and 17 and their respective dependent claims 9, 10, and 18.

***Claim Rejections - 35 USC § 112***

The Action rejects claims 19-20 under 35 USC § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicants respectfully traverse this rejection.

Independent claim 19 has been amended to recite “a computing device.” The claims therefore should be considered definite. Applicants respectfully request withdrawal of the 35 U.S.C. § 112 rejection and allowance of independent claim 19 and its dependent claim 20.

***Claim Rejections under 35 USC § 102***

The Action rejects claims 1-20 under 35 USC 102(e) as being anticipated by Pabla. Applicants traverse the rejections.

**Claims 1-20 are Allowable Over Pabla**

The claims generally are directed to the ability for a device to send a query seeking to discover any devices that provide a particular desired service flexibly whether on an ad hoc or discovery server networking environment. For example, the present Application states “The UPnP protocol lets **controllers** discover the devices and **services hosted on the devices**.” (Application, 6:7-8.) The Application continues by stating that the ad-hoc service discovery protocol generally engages three kinds of actors. At page 6, line 12 *et seq.*, the Application describes discovery responders as “usually devices and services on devices, but possibly controllers,” and the discovery clients 110-111 as controllers. (Application, 6:14-16.) The Application further states, “[i]n multicast mode, the devices whose device or service description matches the query return a response . . . ; in direct mode, the server provides a list of devices or services matching the query.”

The independent claims each recite language relating to a discovery client querying for any devices that provide a desired service. More particularly, Claim 1 recites, “conducting discovery of services of discovery responders by the discovery client.”

Claim 3 recites, “sending further discovery queries for device services by the discovery client...”

Claim 5 recites,

server-based discovery mode programming code for sending discovery queries of the discovery client for device services directly to the discovery server determined to be present in the network; and

ad-hoc discovery mode programming code for sending discovery queries of the discovery client for device services as a multicast transmission to discovery responders in the network.

Claim 8 likewise recites,

server-based discovery mode programming code for sending discovery queries of the discovery client for device services directly to the discovery server determined to be present in the network; and

ad-hoc discovery mode programming code for sending discovery queries of the discovery client for device services as a multicast transmission to discovery responders in the network.

Claim 11 recites, “discovery client operating in ad-hoc discovery mode to send discovery queries for device services as multicast transmissions and operating in server-based discovery mode to suppress multicast transmission of discovery queries for device services by the discovery client.”

Claim 14 recites, “sending discovery queries for device services as a multicast transmission from a discovery client computing device...”

Claim 17 likewise recites, “sending discovery queries for device services as a multicast transmission from the computing device....”

Claim 19 similarly recites, “means for, when connected in an ad-hoc network, sending discovery queries for device services as a multicast transmission from a discovery client computing device...”

The cited art fails to teach or suggest the ability for a discovery client to query which if any devices provide a service. Pabla does not teach or suggest the above recited elements of claim 1. Pabla describes “[a] system and method for providing a **name service** in a peer-to-peer environment . . .” (Pabla, Abs., emphasis added.) Pabla describes that “when a peer 200 boots up for the first time, the peer 200 may not be preconfigured to be aware of any peer group name server 300. In this case, the peer may default to use multicast discovery to discover peers 200 and/or peer groups 304.” (Pabla, para. 0053.) Similarly, Pabla states “the peer 200 may use another discovery method such as multicast discovery to discover the peer group name server 300.” (Pabla, para. 0067.) Thus, to the extent that Pabla describes multicast discovery by a peer, the peer is simply trying to discover a device or group of devices with a particular name on the network, generally. This is not the same as, and does not teach or suggest, conducting discovery “of **device services** of discovery responders by the discovery client as a multicast operation.” In other words, Pabla shows discovery of a device or device group by name of the respective device

or group, and not by the service or services that a device provides. In fact, at no point does Pabla even discuss discovery queries directed to device services as recited in the claims.

For at least this reason, claims 1-20 should be allowable over this art.

***Interview Request***

If the claims are not found by the Examiner to be allowable, the Examiner is requested to call the undersigned attorney to set up an interview to discuss this application.

***Conclusion***

The claims in their present form should be allowable. Such action is respectfully requested.

Respectfully submitted,

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